

School Nutrition Policy Background

Overview:

From what's offered in lunch lines to what's stocked in vending machines, schools are in a powerful position to influence children's lifelong dietary habits. There are nearly twice as many overweight children and almost three times as many overweight adolescents as there were in 1980.¹ The obesity problem is so critical that the Surgeon General, in his 2001 report on overweight and obesity,² labeled it an epidemic.

Obesity is a complex problem with many components. It is important to underscore that the key to healthful nutrition is an active lifestyle complete with good choices made by well-educated students and families.

The New Jersey Department of Agriculture's Division of Food and Nutrition feeds approximately 588,000 school children daily through the federal School Breakfast and Lunch programs. These programs provide nutritionally balanced meals to children at low or no cost.

Now is the time to recognize that good nutrition is just as important as good grades. Achievements in academics and athletics are often indicators of a school district's success. Why shouldn't the eating habits of our school children be just as important, especially when good nutrition bolsters academic and athletic performance?

In May 2003, New Jersey launched its Healthy Choices, Healthy Kids campaign to combat childhood obesity and Type II diabetes and ensure children have access to healthy and nutritious food. The campaign is a joint initiative involving the departments of Agriculture, Education and Health and Senior Services. As part of that initiative, the Department of Agriculture announced it would require school districts to adopt a school nutrition policy and would develop a model policy as a guide.

Under the leadership of New Jersey Agriculture Secretary Charles M. Kuperus, a team of experts from the Division of Food and Nutrition have been actively researching and developing this model policy. The Department of Agriculture is now considering requiring school districts to adopt the standards specified within the model policy by September 2007. By giving school districts 2 ½ years to work with vendor contracts and food suppliers, schools will have ample time to gradually phase in healthier food choices while phasing out those less nutritious foods without negatively affecting revenue.

¹U.S. Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity. [Rockville, MD]: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; [2001]. Available from: US GPO, Washington.

² U.S. Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity. [Rockville, MD]: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; [2001]. Available from: US GPO, Washington.

The following provides the rationale behind the specific standards contained in this policy.

Standard: *Foods of minimal nutritional value may not be served, sold or given out as free promotion anywhere on school property before the end of the school day.*

Rationale: Foods of minimal nutritional value are foods prohibited by the U.S. Department of Agriculture from being sold during meal times. In New Jersey, foods of minimal nutritional value are also restricted from the beginning of the school day until after the end of the last lunch period. This standard extends that restriction until the end of the school day, to be in line with all of the other standards in the policy, which also would be effective for the entire school day. Foods of minimal nutritional value are virtually "empty calorie" foods and would not meet any of our other standards in the policy. They include soda, water ices, chewing gum and certain types of candy.

Standard: *All foods and beverage items listing sugar, in any form, as the first ingredient may not be served, sold or given out as free promotion anywhere on school property before the end of the school day.*

Rationale: Between 1989 and 1996, children's calorie intake increased by approximately 80-230 extra calories per day.³ The increases in calorie intake are driven by increased intakes of foods and beverages high in added sugars and lead to overweight and obesity.⁴

Some states and school districts have adopted standards that restrict sugar by weight. In West Virginia, for example, items containing more than 40 percent sugar by weight are prohibited.

However, our analysis of numerous product labels made it clear that these restrictions would eliminate some food products that also contain nutritional value, such as some yogurts and other dairy products, certain granola bars, and some soups.

Ingredients are listed in order of the quantity contained in the product. By eliminating those products with sugar listed first, products with mostly empty calories would be eliminated. Empty calorie means they are high in calories but contain little or no nutritional value, such as vitamins and minerals.

This standard is easy to follow, eliminates the need for mathematical calculations and allows for a variety of products while eliminating mostly empty calorie products.

Standard: *All forms of candy may not be served, sold or given out as free promotion anywhere on school property before the end of the school day.*

Rationale: Candy is high in sugar, fat and calories and consists of mostly empty calories. It is a major contributor to dental cavities in children.

Prohibiting candy will prevent children from selecting it over a more nutritious snack.

³ US Department of Agriculture, Office of Analysis, Nutrition, and Evaluation. *Changes in Children's Diets: 1989-1991 to 1994-1996*. Washington, DC: USDA, January 2001. Report No CN-01-CD1.

⁴ CSPI, *School Foods Tool Kit: A Guide to Improving School Foods & Beverages*

Standard: No more than 8 grams of total fat per serving. No more than 2 grams of saturated fat per serving.

Rationale: This standard is consistent with the proposed new Dietary Reference Intakes (DRIs) for fat. Fat provides the highest percentage of calories (9 calories per gram) compared with carbohydrates and protein (4 calories per gram). The new Dietary Reference Intakes recommend that children ages 4-18 consume no more than 25-35 percent of calories from fat, based on their calorie needs. These new Dietary Reference Intakes will replace the Recommended Dietary Allowances. They were developed in 2002 by the Food and Nutrition Board, Institute of Medicine, the National Academies, Washington, D.C. The DRIs are based on diet and health reports for macronutrients, which provide an updated and more accurate form to assess nutrients. Old or current guidelines for fat recommend that 30 percent or less of total calories come from fat.⁵

The new Dietary Reference Intakes also recommend that no more than 8-10 percent of total calories come from saturated fats.⁶ Saturated fats have been shown to contribute to heart disease and some cancers.

For simplicity and easy understanding by both students and school food service professionals, a gram standard has been established to equate closely to the percentages for fat and saturated fat. The gram levels can be read directly from the nutrient facts labels on food and beverage products, and do not require any type of calculations that are needed to determine the percentages of fat and saturated fat.

The USDA has established standards requiring schools to plan menus that meet the Dietary Guidelines for Americans, but those standards do not apply to a la carte foods sales and those foods sold in vending machines, school stores, or foods students bring from home.⁷ By limiting saturated fat to 10 percent, total fat consumption may include more monounsaturated or polyunsaturated fat. The ratio of Low-Density Lipoprotein (LDL, bad cholesterol) to High-Density Lipoprotein (HDL, good cholesterol) may improve as a result.⁸

Lowering the amount of total fat calories helps to reduce the consumption of trans fatty acids.⁹ Trans fatty acids are significantly more deleterious than saturated fats because of the partial hydrogenation of liquid vegetable oil, which solidifies, and increases LDLs while reducing HDLs. Currently there are no recommendations for trans fatty acids, but guidelines suggest avoiding trans fats as much as possible.

Standard: All beverages sold or served during the school day, other than milk containing 2% or less fat, or water, shall not exceed 12 ounces. Whole milk shall not exceed 8 ounces.

Rationale: Oversized portions encourage students to consume more calories, which can contribute to them becoming overweight and undernourished.¹⁰ Larger drinks may replace

⁵ Full text of DRIs available online at www.nap.edu/books/0309085373/html/

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⁷ Healthy People 2010, chapter 19, Nutrition and Overweight, FDA, NIH.

⁸ Proceedings of the workshop on individual fatty acids and cancer, Washington, DC, June 4-5, 1996

⁹ Eat, Drink, and Be Healthy: The Harvard Medical School Guide to Healthy Eating, Walter Willet, 2001.

¹⁰ Nutrition Action Healthletter, *Diet and Health: Ten Megatrends*, Volume 28, Number 1.

calories that could otherwise be consumed from eating healthier foods. Adopting the industry standard of a 12-ounce beverage offers a reasonable portion size to students, resulting in the ability to control calories from sugar.¹¹ A 12-ounces portion size is affordable to the students while still being profitable to the food service operation. Because of the high fat content in whole milk, the recommended serving size is further restricted to 8 ounces.

Standard: *In elementary schools, only 100 percent fruit or vegetable juices, milk, or water shall be sold or served.*

Rationale: Children learn eating habits when they are young. This standard teaches them from the start that 100 percent juice, milk and water are healthy.

Milk and juice are among the top sources of vitamin A, vitamin C, B vitamins, calcium, magnesium, and phosphorus for children in the U.S.¹²

Beverages such as soda, fruit drinks, sweetened teas and sports drinks are the some of the largest sources of refined sugar. Moreover, beverages with labels such as fruit drink, fruit juice cocktail and fruit ade contain added sugars, which increase calories and may not supply the level of critical nutrients found in 100 percent juice.¹³ These beverages often replace nutrients provided by fruit.

A 1998 U.S. Department of Agriculture study of the food acquisitions of public unified school districts concluded that the volume of milk acquired decreased by 29 percent, the volume of fruit drinks (not 100 percent juice) acquired increased by 181 percent, and volume of carbonated sodas acquired increased by 1,103 percent between 1984-85 and 1996-97 school years.¹⁴ Another study of children ages 6-13 found that excessive sweetened drink consumption was associated with a decrease in milk consumption, resulting in higher energy intake and weight gain – and insufficient intake of protein, calcium, phosphorus, magnesium and zinc and to a lesser extent, vitamin A.¹⁵

Standard: *In middle and high schools, at least 60 percent of all beverages offered, other than milk or water, must be 100 percent fruit or vegetable juice.*

Rationale: Children learn in elementary school the importance of making healthy choices. Allowing them greater options in middle and high school, provides them opportunities to put what they learned into practice and prepares them for making healthy choices in the adult world. This standard ensures that more than half of the beverages available to students are healthy and nutritious, while recognizing the need to provide individual choices to middle and high school students.

¹¹ ADA Food and Nutrition Guide

¹² Subar, A.F. et al., “Dietary sources of nutrients among U.S. children, 1988-91,” *Pediatrics*, 1998; 102(4): 913-923. Munoz, K.A. et al., “Food intakes of U.S. children and adolescents compared with recommendations,” *Pediatrics*, 1997; 100: 323-329.

¹³ American Dietetic Association, “New research addresses confusion about juice”, 2002, www.eatright.org/Public/Media/PublicMedia_jadahighlights01.cfm.

¹⁴ Office of Analysis and Evaluation, Food and Nutrition Service, “School food purchase study: Final report,” U.S. Department of Agriculture, 1998.

¹⁵ Journal of Pediatrics, June 2003, “Replacing milk with sweetened drinks is associated with weight gain and reduced nutrient intake”.

Standard: *In middle and high schools, no more than 40 percent of all ice cream and frozen desserts shall be allowed to exceed the above standards for sugar, fat and saturated fat.*

Rationale: Allowing middle and high school students greater options, prepares them for making healthy choices in the adult world. This standard ensures that more than half of the ice cream and frozen dessert products available to high school students are low in fat and calories, while recognizing the need to provide individual choices to middle and high school students.

Standard: *Adequate time shall be allowed for student meal service and consumption. Schools shall provide a pleasant dining environment. Schools shall attempt to schedule physical education or recess before lunch whenever possible.*

Rationale: Studies show that environment has a powerful influence on behavior. Meal periods need to be long enough for students to eat and socialize.¹⁶ This standard is consistent with the sample healthy eating policy from the National School Boards Associations' publication Fit, Healthy, and Ready to Learn.¹⁷ The policy states that "students...shall have...adequate time to eat, relax, and socialize: at least 10 minutes after sitting down for breakfast and 20 minutes after sitting down for lunch". Results of a study published in the Journal of the American Dietetic Association (September 1996) suggest that scheduling recess before lunch may significantly increase the amount of school meal components eaten by students at lunchtime. As a result, children in the study were more well-nourished and less hungry when they returned to class. This lack of hunger allowed them to perform better in school after lunch. Additional benefits of scheduling recess before lunch are that children behave better both during and after lunch. They do not rush through their meal in order to extend their playground time.

¹⁶ Team Nutrition's Changing the Scene: Improving the School Nutrition Environment, "Guide to Local Action," Sept. 2002, p. 21

¹⁷ National School Boards Associations' Fit, Healthy, and Ready to Learn, part 1, chapt. E, p. E-18,